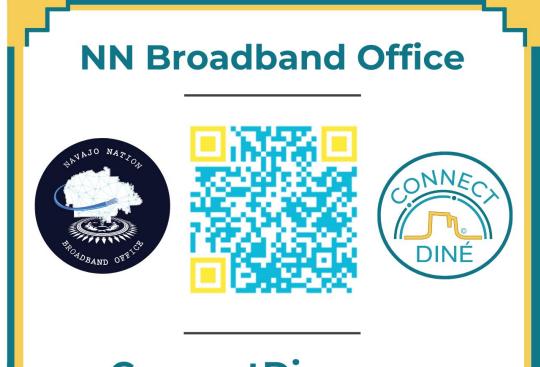
Navajo Nation Broadband Development and Implementation Plan

November 05, 2025 NDOT

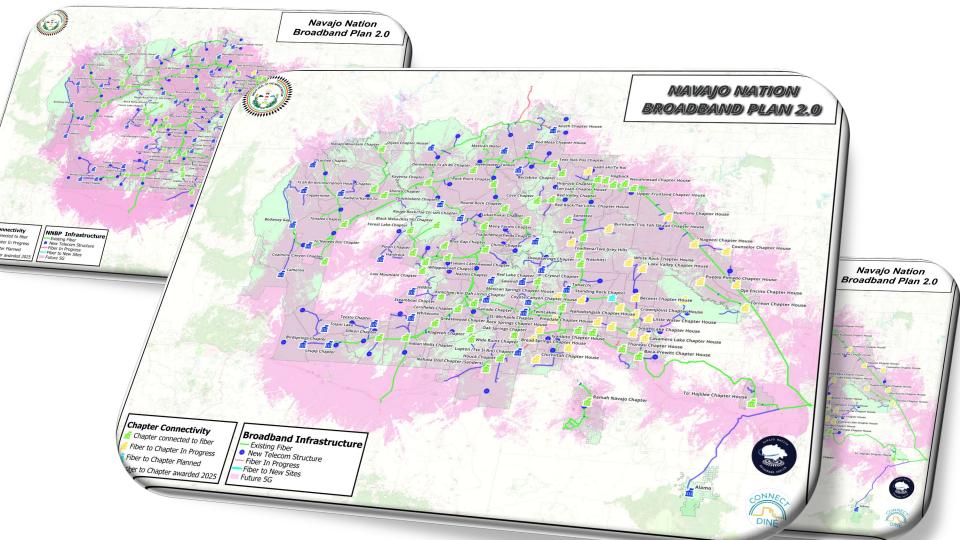


#### AGENDA A

- Navajo Nation Broadband Plan 2.0
- Accomplishments
  - Connectivity Summary
  - o **BEAD**
  - Active Library Certification
  - ARPA
  - o NTIA
  - Wireless Projects Coordinated by the NNBO with GLDD
- In Progress
  - Fiber Build out to the new FRF building
  - ERate Fiber
  - Chapter Connectivity
  - 5G Infrastructure
  - ARPA
  - NTIA
- Q&A



ConnectDine.com





## **Our Vision**



### **EMPOWERING**

Navajo Communities with High-Speed Connections.









## **Our Mission**



## **Broadband for**

**Every Chapter, Every Home, Every Phone** 

## **Technologies**

Multiple technologies bring reliability & keep internet more affordable.

Fiber, wireless, and satellite work best together—they're not rivals, they're teammates.



Low Earth Orbit Satellite



Wireless Towers



Fiber





## NN Broadband Plan 2.0





YOUR NAVAJO BROADBAND TEAM AT WORK

Navajo Nation Broadband Development Plan 2.0

CHAPTER
HOUSE
INMEDIATE
CONNECTIVITY

5G
AND MORE
INFRASTRUCTURE

BEAD

ERATE,
ARPA and
NTIA

## 110 CHAPTER to be CONNECTED

- 52 fiber, 2 PTP, 56 LEO

#### 5G and MORE TOWERS AND FIBER

- 5G, Fiber to Towers and Chapter

#### BEAD – Broadband Equity, Access, and Deployment

- Connect to Internet all unserved and underserved Households and CAIs.

#### **ERATE, ARPA and NTIA**

Push and track current projects

#### **IN THE NAVAJO NATION**

- 52 Chapter already Connected to Fiber
- 102 Certified Libraries

#### IN THE NAVAJO NATION

- 45 New towers
- 49 Future Collocations
- Fiber to towers

#### IN THE NAVAJO NATION

- > 31K eligible House holds to be connected
- Funding pre-awarded for AZ (\$148M), NM (\$110M) and UT (\$26M)

connectdine unding pre-awarded at State level,

#### IN THE NAVAJO NATION

- ERATE: All but 2 locations connected or awarded for construction
- ARPA: Upgraded to LTE, fiber to home, fiber to premise, Wireless Projects
- NTIA: Electronics upgrade, LTE upgrades new towers, fiber to home and fiber to premises

## Navajo Nation Broadband Development Plan 2.0 COSTS

CHAPTER
HOUSE
INMEDIATE
CONNECTIVITY

5G
AND MORE
INFRASTRUCTURE

**BEAD** 

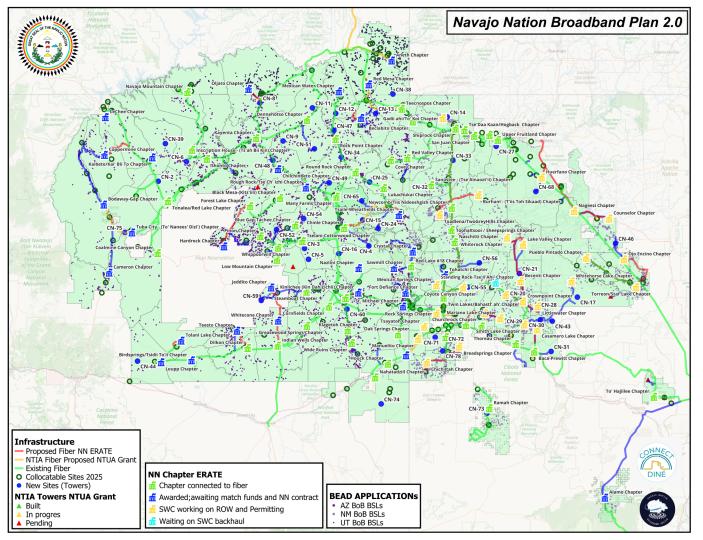
ERATE,
ARPA and
NTIA

\$700K

\$77.8M in RRR
Shortfall
\$113M

RRR \$285M preII awarded
I \$37.75M
matching
connectdine.com funds

\$1.8M matching funds



#### 5G and Infrastructure

- Fiber Connectivity to Chapters and towers
- 5G service.

#### **BEAD**

 Connect (unserved and underserved0 BSL and CAIs throughout Navajo

#### ERATE and CHAPTER CONNECTIVITY

All Chapters/Libraries connected via fiber (end goal) and PTP and LEO (interim)

#### ALL OF THIS IF WE GET YOUR SUPPORT!!

PEOPLE WILL BE CONNECTED!

## **ACCOMPLISHMENTS** TS



# Chapter Connectivity





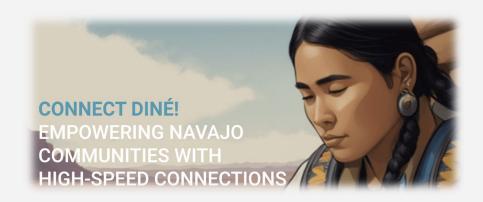
## **Connectivity Summary**

- 6 Chapters
- 1 Senior Center
- Ojo Encino Library wireless extension
- Window Rock District Court
- Oak Ridge Fire response support
- K-9 Search & Rescue support
- Navajo Nation Fairs connectivity support
- Applied for Hometown Grant (TMo) for Sawmill Chapter



## **BEAD** for NN

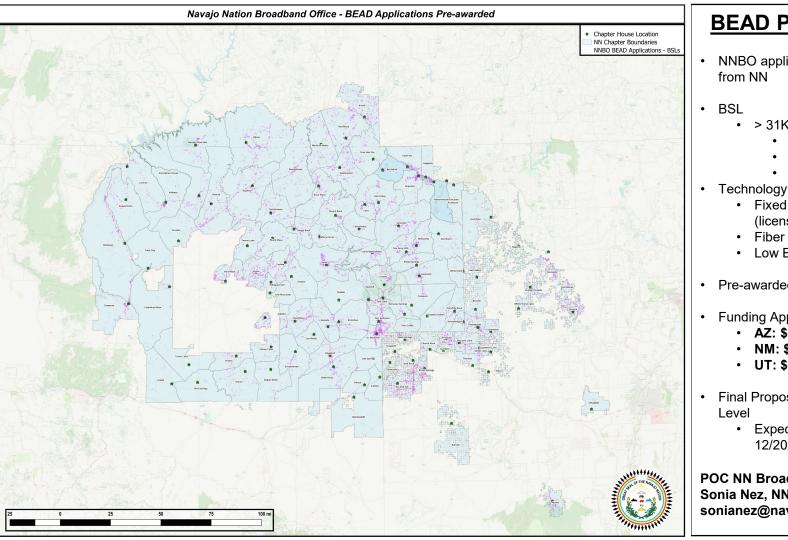




## **Summary BEAD**

	UTBEAD Application	NM BEAD Application	AZ BEAD Application
Project Cost	>\$35 M	>\$140 M	>\$212 M
Total BSLs Served	>2000	>11000	>17000
Fiber Applied	Yes	Yes	Yes
Wireless Applied	Yes	Yes	Yes
LEO applied	Yes	Yes	Yes
Technologies Used	Fiber, FWA, LEO Satellite	Fiber, FWA, LEO Satellite	Fiber, FWA, LEO Satellite
Date of Application	7/10/2025	7/21/2025	7/22/2025

For AZ and NM, federal decision is expected by Nov-Dec time frame UT, federal decision is expected by Dec-Jan time frame

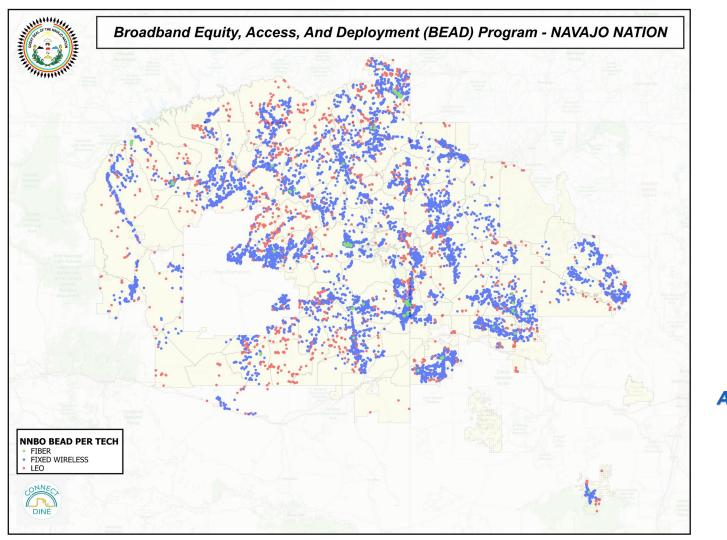


## **BEAD Program in NN**

- NNBO applicant with proper consent from NN
- BSL
  - > 31K BSL eligible
    - >19K FWA
      - >8K FTTH
      - >3K LEO
  - · Fixed Wireless Access
    - (licensed)
  - Fiber
  - Low Earth Orbit Technology
- Pre-awarded by AZ, NM and UT
- Funding Applied for AZ: \$148M
  - NM: \$111M
  - UT: \$26M
- Final Proposal Review at Federal
- Level Expected Completion by

12/2025 - 1/2026

**POC NN Broadband Office** Sonia Nez, NNBO sonianez@navajo-nsn.gov



#### **BEAD STATUS**

Goal connect 31K HH

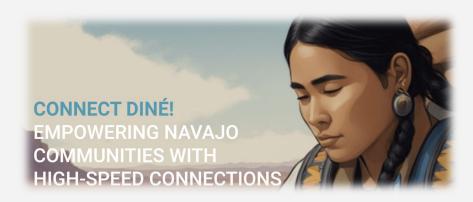
ALL OF THIS IF WE GET YOUR SUPPORT!!

PEOPLE WILL BE CONNECTED!



## Active Chapter Libraries





YOUR NAVAJO BROADBAND TEAM AT WORK

#### WHAT IS ERATE A T E

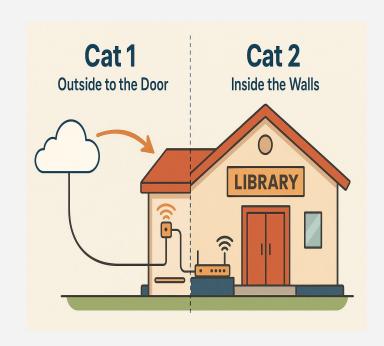
The E-Rate program provides up to 90% discounts on broadband and telecommunications services to ELIGIBLE schools and libraries within the Navajo Nation, funding vital internet access and infrastructure projects that help close the digital divide.

This funding is managed by the Universal Service Administrative Company (USAC) under the supervision of the FCC.



## **Eligible services**

- Category One Covers the services needed to bring internet to the building.
- Category Two —Covers the services and equipment needed to bring internet inside the building



#### HOWNTO BE AN ACTIVE CHAPTER LIBRARYER LIBRARY

#### Library Implementation

 Small Space acting as a library under control and supervision of the main library in WR

#### • Requirement:

- 1. At least one person (who may be part-time or a volunteer) responsible for the library's operation.
- Posted and predictable open hours (Specific days and times, e.g. 10 AM-3 PM on Mondays, Tuesdays, Wednesdays, and Fridays)
- 3. Physical or digital items available for public use such as books, computers, eBooks, or internet access.



1



2



3

#### Certification

https://form.jotform.com/252466037921054



#### Certification of Library Status for Navajo Nation Chapter House

This template certifies compliance with minimum FCC requirements for ERate Chapter House Libraries. Complete all sections, have an authorized representative sign and date the document. This document will be submitted to Sonia Nez, NNBO Manager

7 - 4	4.	C1	TT /T *1	T.1
section	1:	Cnapter	House/Library	identification

olunteer) responsible for the library's operation.				
ection	1 2: Library Staff Certification	The FCC	requires at least one person (who may be part-time or a	
•	Phone: (928) 697-5681	Email:	ebadonie@nnchapters.org	
•	Chapter: Chilchindeto Chap	ter	Contact Person: Eugene Badonie	

Section 3: Regular Hours Certification The FCC requires posted and predictable open hours (e.g., specific days and times, such as 10 AM–3 PM on Mondays, Wednesdays, and Fridays).

Posted Service Hours: 10:00 am -3:00 pm Monday-Thursday

Section 4: Materials for Public Use Certification The FCC requires physical or digital items available for public use, such as books, computers, eBooks, or internet access.

· Do you have physical or digital items available for public use



Name: Rose Gillis

0 N

Internet Access:



 $\overline{\phantom{a}}$ 

Section 5: Overall Certification and Signature I certify that the information provided is true and accurate, and this chapter house meets FCC library requirements.

•	Name: Eugene Badonie		Title: _	Chapter Manager
	Signature:	Signed at:	Date:	09/09/2025
	_	2025-09-09 10:13:20		

✓ I certify the information is true and accurate and I am authorized to submit this certification.

## Certification Status

Status	Chapter Certification
Completed	102
In Progress	5
Not Received	2
Grand Total	109

Tuba City Chapter decided not to participate in the program

#### Completed

Alamo	Kayenta	Rock Springs	
Aneth	Kinlichee (Kin Dal Lichi)	Rough Rock	
Baca/ Prewitt	Klagetoh	Round Rock	
Becenti	Lake Valley	San Juan	
Beclabito	LeChee	Sanostee	
Black Mesa	Leupp	Sawmill	
Blue Gap	Little water	Sheepsprings	
Bodaway/Gap	Low Mountain	Shiprock	
Bread Springs	Lukachukai	Shonto	
Burnham	Lupton	Smith Lake	
Cameron	Manuelito	St. Michaels	
Casamero Lake	Many Farms	Standing Rock	
Chichiltah	Mariano Lake	Steamboat	
Chilchinbeto	Mexican Springs	Sweetwater	
Chinle	Mexican Water	Teec Nos Pos	
Churchrock	Nageezi	Teesto	
Coalmine Canyon	Nahata Dziil	Thoreau	
Coppermine	Nahodishgish	Toadlena/ Two Grey Hills	
Cornfields	Naschitti	Tohajiilee	
Counselor	Navajo Mountain	Tohatchi	
Cove	Nazlini	Tolani Lake	
Coyote Canyon	Nenahanezad	Tonalea	
Crownpoint	Newcomb	Torreon - Star Lake	
Crystal	Ojo Encino	Tsaile - Wheatfields	
Dennehotso	Oljato	Tsayatoh	
Dilkon	Pinedale	Tse Daa Kaan (Hogback)	
Forest Lake	Pinon	Tselani/Cottonwood	
Fort Defiance	Pueblo Pintado	Twin Lakes	
Ganado	Ramah	Upper Fruitland	
Greasewood	Red Lake #18	Whippoorwill	
Hard Rock	Red Mesa	White Cone	
Huerfano	Red Rock	White Rock	
Jeddito	Red Valley	Whitehorse Lake	
Indian Wells	Rock Point	Wide Ruins	

#### connectdine.com

#### In progress

**Bird Springs** 

Gadii ahi

Houck

**Inscription House** 

Oak Springs

#### **Not Received**

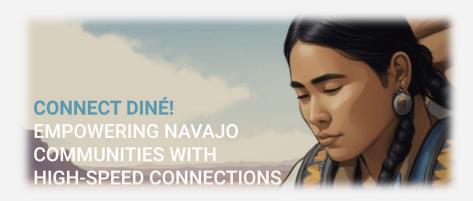
lyanbito

Kaibeto



## **ARPA Updates**





YOUR NAVAJO BROADBAND TEAM AT WORK

## **Summary ARPA**

#### Smith Bagley, Inc.

**4G LTE Mobile Network Upgrades:** 40 towers completed.

#### **DINE College**

Community Wi-Fi Project: Completed in Tsaile and the Diné College area.

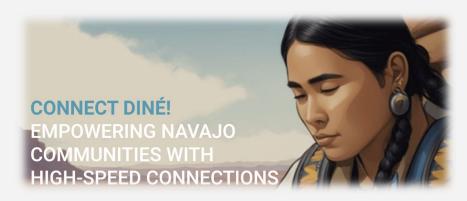
#### **OSO Internet**

Ramah, NM Fiber to the Home (FTTH) Project: 580 of 600 homes connected to fiber



## NTIA Updates





YOUR NAVAJO BROADBAND TEAM AT WORK

## **Summary NTIA TBCP**

#### NTIA Tribal Broadband Connectivity Program (TBCP) Projects managed by NTUA

#### • Towers Built NTUA, Sacred Winds and SBI:

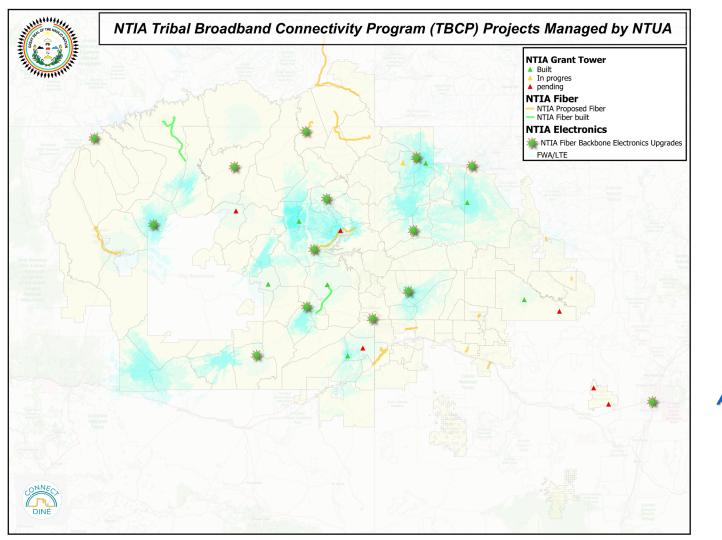
7 towers constructed in San Juan, Nazlini, Many Farms, Pine Springs, and Moncisco Mesa, Low Mountain and White Horse areas. NTUA and SBI

#### • Fiber Deployment:

o Completed: Fiber to Navajo Mountain, Nazlini, and Red Mesa, NTUA.

#### • <u>Technology Improvements and Other projects:</u>

- Completed Upgrade of fiber backbone capacity across the Navajo Nation.
- o Completed LTE Upgrade, SBI



#### **NTIA STATUS**

## **Goal Complete**NTIA Projects

ALL OF THIS IF WE GET YOUR SUPPORT!!

PEOPLE WILL BE CONNECTED!



# Wireless Projects Coordinated by the NNBO with GLDD



YOUR NAVAJO BROADBAND TEAM AT WORK

#### 2025 - Wireless Projects Coordinated by the NNBO with GLDD

Carrier =	Site Location =	Required Agreement =	Status 🖘	Carrier 😾	Site Location =	Required Agreement =	Status =
AT&T	Shiprock	Tower Lease	Pending	Smith Bagley	Kayenta School	Power SLA	Pending
AT&T	Thoreau	Tower Lease	Pending	Smith Bagley	Dine College - Shiprock	Power SLA	Approved
AT&T	Little Black Spot	Collocation Sublease	Pending	Smith Bagley	NNSC - Shiprock Store	Power SLA	Pending
AT&T	Marsh Pass	Collocation Sublease	Pending	Smith Bagley	NNSC - Kayenta Store	Tower Lease	Pending
Commnet Wireless	Tohatchi	Collocation Sublease	Pending	Smith Bagley	Raplee Ridge	Tower Lease	Approved
Commnet Wireless	Standing Rock	Collocation Sublease	Pending	T-Mobile	Lupton	Collocation Sublease	Pending
NTUA	Tuba City OTC	Power SLA	Approved	T-Mobile	Standing Rock	Collocation Sublease	Pending
NTUA	Black Rock Tower	Tower Lease	Approved	T-Mobile	Cameron	Collocation Sublease	Pending
NTUA	OakSprings Tower	Tower Lease	Approved	Verizon	Preston Mesa	Tower Lease	Pending
NTUA	Dezza Bluff Tower	Tower Lease	Approved	Verizon	Houck	Tower Lease	Pending
NTUA	Sand Springs Tower	Tower Lease	Approved	Verizon	Window Rock / Summit	Tower Lease	Pending
NTUA	Chaco Canyon	Tower Lease	Approved	Verizon	Chaco Canyon	Tower Lease	Pending
Smith Bagley	Klagetoh	Power SLA	Approved	Verizon	Manuelito	Tower Lease	Pending
Smith Bagley	Many Farms West	Power SLA	Approved	Verizon	Shiprock	Tower Lease	Pending
Smith Bagley	Ram Pasture	Tower Lease	Approved	Verizon	Jacks Peak	Collocation Sublease	Pending
Smith Bagley	Pine Springs	Power SLA	Approved	Verizon	Gibson Peak	Collocation Sublease	Pending
Smith Bagley	Navajo Nation Fair	Power SLA	Approved	Verizon	Narbona Pass	Collocation Sublease	Pending

## IN PROGRESS S



# Fiber to new FRF Bldg



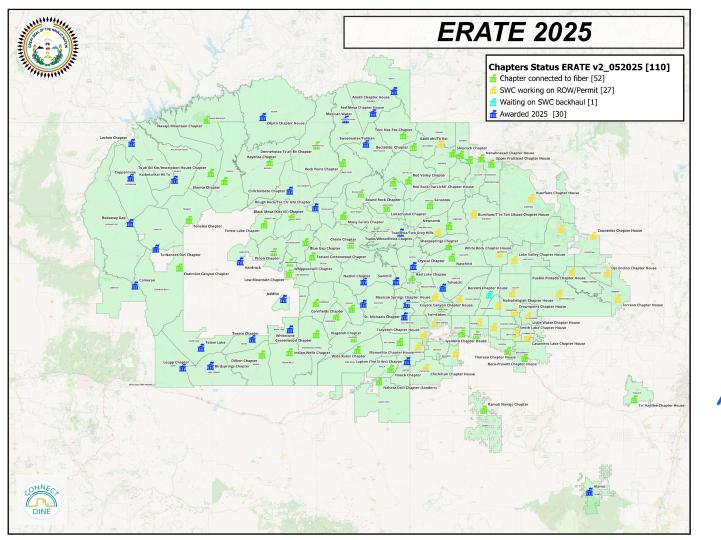




## **Erate Fiber**







#### **ERATE STATUS**

## Goal Fiber to all Chapters

ALL OF THIS IF WE GET YOUR SUPPORT!!

PEOPLE WILL BE CONNECTED!

#### Connected to Fiber

Beclabito Chapter Amber Kanazbah Crotty Cove Chapter Amber Kanazbah Crotty Red Valley Chapter Amber Kanazbah Crotty Sanostee - (Tse Alnaozt'ii) Chapter Amber Kanazbah Crotty Toohaltsooi / Sheepsprings Chapter Amber Kanazbah Crotty Red Lake #18 Chapter Andy Nez Houck Chapter Arbin Mitchell Klagetoh Chapter Arbin Mitchell Nahatadziil Chapter Arbin Mitchell Wide Ruins Chapter Arbin Mitchell Oak Springs Chapter Brenda Jesus Lukachukai Chapter Carl R. Slater Rock Point Chapter Carl R. Slater Round Rock Chapter Carl R. Slater Casey Allen Johnson Coalmine Canyon Chapter Cherilyn Yazzie Dilkon Chapter Greasewood Springs Chapter Cherilyn Yazzie Indian Wells Chapter Cherilyn Yazzie Blue Gap-Tachee Chapter Crystalyne Curley Low Mountain Chapter Crystalyne Curley Many Farms Chapter Crystalyne Curley Tselani-Cottonwood Chapter Crystalyne Curley Teecnospos Chapter **Curtis Yanito** Shiprock Chapter Eugenia Charles-Newton Baca-Prewitt Chapter George Tolth Germaine Simonson Black Mesa-(Kits'iili) Chapter Germaine Simonson Forest Lake Chapter Germaine Simonson Pinon Chapter Whippoorwill Chapter Germaine Simonson Tonalea/Red Lake Chapter Helena Nez Begay Inscription House - (Ts'ah Bii Kin) Chapter Herman M. Daniels, Jr. Navajo Mountain Chapter Herman M. Daniels, Jr. Shonto Chapter Herman M. Daniels, Jr. Red Rock/Tse' Lichii' Chapter Lester Yazzie Naschitti Chapter Nathan Notah Twin Lakes/Bahastl' ah' Chapter Nathan Notah Ramah Chapter Norman M. Begay To' Hajiilee Chapter Norman M. Begay Nenahanezad Chapter Rickie Nez Newcomb/Tijs Nideeshgish Chapter Rickie Nez San Juan Chapter Rickie Nez Tse'Daa Kaan/Hogback Chapter Rickie Nez Upper Fruitland Chapter Rickie Nez Dennehotso Chapter Shaandiin Parrish Kaventa Chapter Shaandiin Parrish Shawna Ann Claw Chinle Chapter Churchrock Chapter Steven R. Arviso Steven R. Arviso Ivanbito Chapter Thoreau Chapter Steven R. Arviso Cornfields Chapter Vince R. James Ganado Chapter Vince R. James

Vince R. James

Steamboat Chapter

#### CHAPTER LIBRARIES ERATE STATUS FIBER

Awarded Waiting M	atching Funds
Crystal Chapter	Andy Nez
Fort Defiance Chapter	Andy Nez
Sawmill Chapter	Andy Nez
Lupton (Tse Si Ani) Chapter	Arbin Mitchell
St. Michael Chapter	Brenda Jesus
Rough Rock/Tse Ch' Izhi Chapter	Carl R. Slater
Tsaile-Wheatfields Chapter	Carl R. Slater
Birdsprings/Tsidii To'ii Chapter	Casey Allen Johnson
Cameron Chapter	Casey Allen Johnson
Leupp Chapter	Casey Allen Johnson
Tolani Lake Chapter	Casey Allen Johnson
Teesto Chapter	Cherilyn Yazzie
Whitecone Chapter	Cherilyn Yazzie
Nazlini Chapter	Crystalyne Curley
Aneth Chapter	Curtis Yanito
Mexican Water Chapter	Curtis Yanito
Red Mesa Chapter	Curtis Yanito
Tolikan - Sweetwater Chapter	Curtis Yanito
Hardrock Chapter	Germaine Simonson
Bodaway-Gap Chapter	Helena Nez Begay
Coppermine Chapter	Helena Nez Begay
Kaibeto/Kai' Bii To Chapter	Helena Nez Begay
LeChee Chapter	Helena Nez Begay
Oljato Chapter	Herman M. Daniels, Jr.
Tohatchi Chapter	Nathan Notah
Alamo Chapter	Norman M. Begay

Otto Tso

Shaandiin Parrish

Vince R. James

Vince R. James

Tuba City - (To' Nanees' Dizi') Chapter

Kinlichee (Kin Dah Lichii) Chapter

Chilchinbeto Chapter

Jeddito Chapter

Gadii ahi/To' Koi Chapter	Amber Kanazbah Crotty
Toadlena/TwoGreyHills Chapter	Amber Kanazbah Crotty
Becenti Chapter	Danny Simpson
Crownpoint Chapter	Danny Simpson
Huerfano Chapter	Danny Simpson
Lake Valley Chapter	Danny Simpson
Nageezi Chapter	Danny Simpson
Nahodishgish Chapter	Danny Simpson
Whiterock Chapter	Danny Simpson
Casamero Lake Chapter	George Tolth
Counselor Chapter	George Tolth
Littlewater Chapter	George Tolth
Ojo Encino Chapter	George Tolth
Pueblo Pintado Chapter	George Tolth
Torreon/Star Lake Chapter	George Tolth
Whitehorse Lake Chapter	George Tolth
Breadsprings Chapter	Lester Yazzie
Chichiltah Chapter	Lester Yazzie
Manuelito Chapter	Lester Yazzie
Rock Springs Chapter	Lester Yazzie
Tsayatoh Chapter	Lester Yazzie
Coyote Canyon Chapter	Nathan Notah
Mexican Springs Chapter	Nathan Notah
Burham - (T'iis Toh Sikaad) Chapter	Rickie Nez
Mariano Lake Chapter	Steven R. Arviso
Pinedale Chapter	Steven R. Arviso

#### Waiting on SWC backhaul

Standing Rock-Tse'li'Ahi' Chapter

Smith Lake Chapter

Danny Simpson

Steven R. Arviso

	110 CHAPTERS NAVAJO NATION				
CATEGORY 1: Fiber Construction and Direct	Chapters connected to fiber	Chapters received notice to proceed for fiber construction	•	Chapters waiting for backhaul	
Internet Access	<b>52</b>	27	30	1	
	Funding received for all 110 chapters				
CATEGORY 2: Network Inside Chapter	Installed equipment at ~90% of chapters				
Library	<b>Network: ERate Staff</b>		Active		
	<b>Network: ERate Student</b>		Active		

From USAC's view, <u>active libraries are expected at each site</u> because CAT2 funds were received for all 110 chapters.



# Chapter House Connectivity





YOUR NAVAJO BROADBAND TEAM AT WORK

### Summary Chapter Connectivity

- REQUEST FOR STATEMENTS OF QUALIFICATION process completed by July 2025
  - 56 Chapter will be connected via LEO
  - 2 Chapters to be connected PTP
  - Funding pending going thru UUBF request
    - NM Capital Outlay not used



# 5G by 2030



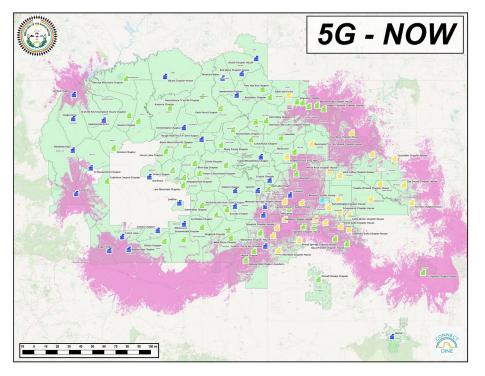


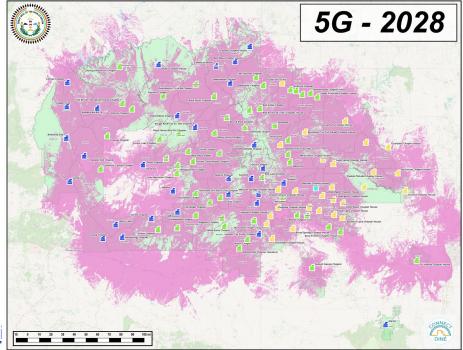
### Summary Infrastructure RFP

- Highlights
  - 12 Responses
    - 1 Service Provider
    - Several Constructions Companies
    - 1 Navajo utility Company
  - RFP Economic Development Component Very important
  - Closed on January 16, 2025
  - Evaluation completed in April 2025
  - Awarded to T-Mobile
    - 45 new sites
    - 49 Collocations

### PROJECT COST – 5G WITH TMOBILE

	Collocation on Existing Towers	New NN Owned Towers	Total Cost	Remarks
Radio Network	49	45	\$ 84,500,000.00	5G Radio Network
Transport Network	425 miles		\$ 110,658,250.00	Transport – Fiber Based
Project Grand Total:			\$ 195,158,250.00	
NNBO Funds Speaker Funds			\$ 77,800,000.00	521/RRR, waiting legislation to allow access to funds
			\$ 3,500,000.00	CD Speaker Crystalynn Curley broadband funds for her area
FUNDING NEED			\$ 113,858,250.00	



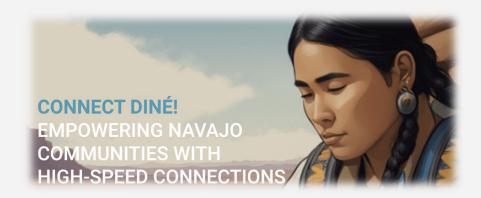


connectd



# **ARPA**





# **Summary ARPA**

#### **OSO Internet**

Ramah Chapter Fiber Project: 40 homes to be connected to fiber

### **Sacred Winds**

**Fiber middle mile and last-mile** construction for underserved areas in New Mexico. Planning and Engineering and Permitting

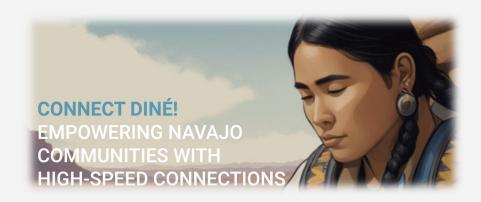
### <u>NTU</u>

Additional Community Wi-Fi deployments near NTU campuses. Planning and Engineering.



# NTIA





### **Summary NTIA TBCP**

### NTIA Tribal Broadband Connectivity Program (TBCP) Projects managed by NTUA

#### • Towers Built NTUA, Sacred Winds and SBI:

- o 1 tower in progress (Black Rock). NTUA
- 6 towers pending (To'Hajiilee (2), Torreon, Oak Springs, Ram Pasture, Sand Springs). Sacred Winds and SBI

#### • Fiber Deployment:

o Planned: Bodaway, Chinle to Tsaile, Manuelito, Aneth, Crownpoint, Thoreau, and Baca areas, NTUA and Sacred Winds.

#### • <u>Technology Improvements and Other projects:</u>

o Almost Complete – Public Safety Equipment for Vehicles

## **Question and Answer**





# Ahéhee'

### **Your Broadband Team**

Sonia Nez, NNBO
Budweena Harrison, NNBO
Laura Johnson, NNBO
Bernardo Portilla, Americas
Elrena Mitchell, Americas
Brian Gilbert, Americas

sonianez@navajo-nsn.gov

bportilla@americasrf.com

